REMARKS/ARGUMENTS

The Applicants have carefully considered this Application in connection with the Examiner's

Action and respectfully request reconsideration of this Application in view of the following remarks.

The Applicants originally submitted Claims 1-20 in the Application. Accordingly, Claims 1-20 are

currently pending in the Application.

I. Rejection of Claims 1-3, 6-10, 13 and 14 under 35 U.S.C. §103

The Examiner has rejected Claims 1-3, 6-10, 13 and 14 under 35 U.S.C. §103(a) as being

anticipated by U.S. Publication No. 2002/0110086 to Reches ("Reches") in view of U.S. Patent

Publication 2002/0087778 to Dell *et al.* ("Dell"). The Applicants respectfully disagree in light of the

following remarks, and request the claims be allowed to issue.

The Examiner recognizes that Reche does not disclose "causing packets [the Examiner

ignores language of packets that are *"unencapsulated, unsegmented and of differing lengths"* to be

discussed below] to be transmitted only when a destination FIFO and in interposing one of the

crossbar FIFOs have sufficient memory at the same time to receive and then contain an entirety of

[*sic.* "a packet of"] the packets." (*See* Examiner's Action, page 3)

The Examiner cites to Dell to cure this deficiency. The Examiner contends:

> See pages 8-9 paragraphs 111-129, pages 9-10 paragraphs 128-137, and Figures 12 and
> 15-16 of Dell et al. for reference to input devices receiving grants to transmit cells only
> when there is no back-pressure in corresponding FIFO queues that make up a path from
> an input to the destination meaning that a cell is transmitted toward the output only
> when all queues have enough memory to contain the cell at the same time. (*See*
> Examiner's Action, pages 3-4.)

As discussed in previous Amendments for the above Application, Dell is directed a switching

stage that employs crossbar devices. (*See* page 2, paragraph [0013]). In Dell, the "switch fabric of the present invention is a cell-switching engine handling *fixed-sized* switching cells." (*See* page 6, paragraph [0090]). Dell uses one or more crossbars to achieve scalability in self-routing of cells. (*See* page 2, paragraph [0012]).

As also discussed in the previous Amendments, in Dell, "[a] switching cell has a header and a payload. The payload size is programmable... The term 'programmable' implies that ... the particular payload size is selected when the fabric switch is initially configured. Once the switch fabric is configured, the payload size remains fixed for all subsequent switch fabric operations." (*See* page 6, paragraph [0090]; emphasis added).

In paragraph [0091], Dell states:

[0091] Protocol independence is achieved b*y encapsulating user data packets into the payload of switching cells*. This encapsulation function is provided by network processors on the line cards. When user data packets are larger than the switching cell size, the encapsulation function involves dividing each user data packet into two or more different switching cells. (Emphasis added.)

In other words, as discussed in prior Amendments, Dell *encapsulates* data packets into the payload of switching *cells*. The Applicants respectfully state that the Examiner is disregarding claim language. The Applicants respectfully state that neither a fixed length cell of Dell, nor the cited portions of Dell, disclose or suggest wherein the cells "plurality of packets that are unencapsulated, unsegmented and of differing lengths," are as is also claimed in Claim 1. This is not disclosed or suggested in Dell.

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Moreover, there is an explicit "teaching away" from a use of segmentation within Reche. According to MPEP §2146.2: "References Cannot Be Combined Where Reference Teaches Away From Their Combination."

Reche states:

> [0004] Both Aybay and McKeown illustrate crossbar switches that use a synchronous scheduling scheme and handle fixed length cells. Variable length packets are fragmented to a plurality of fixed length cells before being sent across the crossbar switch to be reassembled to generate variable length packets. At each time slot a plurality of fixed size cells are sent across the crossbar switch.

> [0005] McKeown further illustrates a scheduling mechanism that calculates all the required connectivity of the crossbar at each time slot. *A main disadvantage of these crossbar switches is that the segmentation and the reassembly are both time and resource consuming. Furthermore, the addition of control signals for allowing the segmentation and reassembly of the variable length packet reduce the throughput of the crossbar switch.* (Emphasis added)

The above constitutes an explicit teaching away from the fixed cell segmentation approach of Dell. Dell is therefore an inapposite reference, and the Examiner has not made a proper *prima facie* case of obviousness.

According to the MPEP §2141.03: "Prior Art Must Be Considered in Its Entirety, Including Disclosures that Teach Away From the Claims: A prior art reference must be considered in its entirety, *i.e.,* as a whole, including portions that would lead away from the claimed invention." One of ordinary skill in the art would not be motivated to combine Reches, which explicitly teaches away from packet segmentation, with Dell, which performs packet segmentation to create programmed length cells, to arrive at the invention of Claim 1. The Applicants therefore

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respectfully state that the Examiner has provided a proper prima *facie case* of obviousness for

Claim 1.

The above "teaching away "in Reche is not surprising. According to the MPEP 2143.02 VI:

"The Proposed Modification Cannot Change the Principle or Operation of a Reference," which the

Examiner would improperly do if allowed to combine the two references. For example, if,

arguendo, the programmed cells of Dell were to be used in the variable packet environment of

Reche as improperly proposed by the Examiner, there would be no multiport switch and method for

forwarding *variable length* packets across a multiport switch that allows fast and efficient flow of

variable length packets, as discussed in paragraph [0007].

Indeed, the "Field of the Invention" of Reches states:

[0001] The present invention relates to a multiport switch and a method for
forwarding variable length packets across a multiport switch and especially for a
method for forwarding variable length packets *without segmenting the variable
length packets to fixed sized cells* within a network element having a multiport
switch. (Emphasis added.)

Furthermore, the "Summary of the Invention" of Reches states:

[0008] The invention provides a method for forwarding variable length packets
across a multiport switch. *The method does not require to segment or to fragment a
received variable length packet thus reducing overhead and allowing an enhanced
throughput of the crossbar*. The method is based upon a periodic scheduling scheme
that simplifies the scheduling.

The Examiner has therefore again not presented a proper *prima facie* case of obviousness.

This is at least because adding the fixed/programmed cell length of Dell as proposed by the

Examiner would defeat purposes of Reches, such as a periodic scheduling scheme that simplifies

the scheduling of variable length packets, as discussed in paragraph [0008]. The Applicants

therefore respectfully state that the Examiner has not therefore presented a *prima facie* case of obviousness for independent Claim 1.

The Applicants respectfully assert that the cited references do not support the Examiner's rejection under 35 U.S.C. §103(a) of Claim 1 and its dependent claims, when considered as a whole. Nor, for analogous reasons, do the cited references support the Examiner's rejection under 35 U.S.C. §103(a) of Claims 8 and 15 and their dependent claims, when considered as a whole. Therefore the Examiner has not presented a *prima facie* case of obviousness. The Applicants therefore respectfully request the Examiner withdraw the rejection of Claims 1-3, 6-10, 13 and 14 and allow issuance thereof.

II. Rejection of Claims 4-5, 11-12, 15-17, 18-20 under 35 U.S.C. §103

The Examiner has rejected Claims 4, 5, 11 and 12 under 35 U.S.C. §103(a) as being unpatentable over Reches in view of Dell and in further view of U.S. Patent No. 6,975,638 to Chen, *et al.* ("Chen"). The Examiner has also rejected Claims 15-17 and 20 under 35 U.S.C. §103(a) as being unpatentable over Reches in view of Dell and in further view of U.S. Patent No. 5,905,873 to Hartman, *et al.* ("Hartman"). The Examiner has also rejected Claims 18 and 19 under 35 U.S.C. §103(a) as being unpatentable over Reches in view Dell and Hartman and in further view of Chen.

The Applicants respectfully submit that they have not found a teaching within Hartman or Chen that compensates for the above-discussed deficiencies of Reches or Dell. Nor has the Examiner cited Hartman or Chen for such a proposition.

Therefore the Examiner has not presented a *prima facie* case of obviousness. Therefore, the

Applicants respectfully assert that the cited references do not support the Examiner's rejection under 35 U.S.C. §103(a) of dependent Claims 4-5, 11-12, 15-17, 18-20, when considered as a whole. The Applicants therefore respectfully request the Examiner withdraw the rejection of Claims 4-5, 11-12, 15-17, 18-20 and allow issuance thereof.

III. Conclusion

In view of the foregoing Amendment and remarks, the Applicants see all of the claims currently pending in this Application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 1-20. Applicants, however, respectfully reserve the right to traverse arguments or characterizations in the present Examiner's Action that are not specifically addresses in the present Amendment.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present Application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 08-2395.

Respectfully submitted,

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